Docket No.: HEINING

Int. Appl. No.: PCT/EP2005/050809

AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.-10. (Canceled)

11. (New) An electric motor, comprising:

an internal rotor:

a hollow shaft connected to the rotor and having an interior hollow space; and

a power supply for supply of electric energy to the electric motor, said power supply including a converter, and an electronic control circuit operatively connected to the converter, said power supply being integrated entirely in the hollow space of the hollow shaft and stationarily mounted within the hollow space.

- 12. (New) The electric motor of claim 11, further comprising a bearing shield for attachment of the converter.
- 13 (New) The electric motor of claim 11, further comprising a transducer integrated in the hollow space within the hollow shaft.
- 14. (New) The electric motor of claim 13, wherein the transducer has at least one signal track arranged on an inside surface of the hollow shaft.
- 15. (New) The electric motor of claim 13, wherein the transducer is a magnetic transducer.
- (New) The electric motor of claim 13, wherein the transducer is an inductive transducer.
- 17. (New) The electric motor of claim 13, wherein the transducer is an optical transducer.

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 (New) The electric motor of claim 13, wherein the transducer is a capacitive transducer.

- 19. (New) The electric motor of claim 13, wherein the transducer has an electronic evaluation circuit partially or completely integrated in the hollow space within the hollow shaft.
- 20. (New) The electric motor of claim 11, further comprising fan blades attached to an inside surface of the hollow shaft.
- 21. (New) The electric motor of claim 11, wherein the converter is implemented as a converter without an DC-link capacitor.
- 22. (New) The electric motor of claim 11, wherein the converter is implemented as a matrix converter.
- 23. (New) A machine-tool or production machine, comprising an electric motor including an internal rotor, a hollow shaft connected to the rotor and having an interior hollow space, and a power supply for supply of electric energy to the electric motor, said power supply including a converter, and an electronic control circuit operatively connected to the converter, said power supply being integrated entirely in the hollow space of the hollow shaft and stationarily mounted within the hollow space.
- 24. (New) The machine tool or production machine of claim 23, further comprising a bearing shield for attachment of the converter.
- 25. (New) The machine tool or production machine of claim 23, further comprising a transducer integrated in the hollow space within the hollow shaft.

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- 26. (New) The machine tool or production machine of claim 25, wherein the transducer has at least one signal track arranged on an inside surface of the hollow shaft.
- 27. (New) The machine tool or production machine of claim 25, wherein the transducer is a magnetic transducer.
- 28. (New) The machine tool or production machine of claim 25, wherein the transducer is an inductive transducer.
- 29. (New) The machine tool or production machine of claim 25, wherein the transducer is an optical transducer.
- 30. (New) The machine tool or production machine of claim 25, wherein the transducer is a capacitive transducer.
- 31. (New) The machine tool or production machine of claim 25, wherein the transducer has an electronic evaluation circuit partially or completely integrated in the hollow space within the hollow shaft.
- 32. (New) The machine tool or production machine of claim 23, further comprising fan blades attached to an inside surface of the hollow shaft.
- 33. (New) The machine tool or production machine of claim 23, wherein the converter is implemented as a converter without an DC-link capacitor.
- 34. (New) The machine tool or production machine of claim 23, wherein the converter is implemented as a matrix converter.